Message

From: Jennings, Susan [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=B3E06D481ADC45F296232CF2DE82A8B7-JENNINGS, SUSAN]
Sent: 8/19/2021 5:54:40 PM
To: Harbottle, Heather [Heather.Harbottle@fda.hhs.gov]; Craig, Michael R (CDC) [bez7@cdc.gov]; Gilbert, Jeffrey M [Jeff.Gilbert@fda.hhs.gov]
CC: Suarez, Stephanie [Suarez.Stephanie@epa.gov]; Sievert, Dawn M (CDC) [alz1@cdc.gov]
Subject: RE: [EXTERNAL] RE: New Chemical proposed

Thanks for the response, nonetheless.

From: Harbottle, Heather <Heather.Harbottle@fda.hhs.gov>
Sent: Thursday, August 19, 2021 1:21 PM
To: Jennings, Susan <Jennings.Susan@epa.gov>; Craig, Michael R (CDC) <bez7@cdc.gov>; Gilbert, Jeffrey M <Jeff.Gilbert@fda.hhs.gov>
Cc: Suarez, Stephanie <Suarez.Stephanie@epa.gov>; Sievert, Dawn M (CDC) <alz1@cdc.gov>
Subject: RE: [EXTERNAL] RE: New Chemical proposed

Hi Susan and all,
Jeff is out but I don't think we have anything to add from a CVM standpoint.

Thanks,
Heather

From: Jennings, Susan <Jennings.Susan@epa.gov>
Sent: Thursday, August 19, 2021 12:54 PM
To: Craig, Michael R (CDC) <bez7@cdc.gov>; Gilbert, Jeffrey M <Jeff.Gilbert@fda.hhs.gov>; Harbottle, Heather <Heather.Harbottle@fda.hhs.gov>
Cc: Suarez, Stephanie <Suarez.Stephanie@epa.gov>; Sievert, Dawn M (CDC) <alz1@cdc.gov>
Subject: [EXTERNAL] RE: New Chemical proposed

Thanks, Michael.

Susan.

From: Craig, Michael R. (CDC/DDID/NCEZID/DHQP) <bez7@cdc.gov>
Sent: Thursday, August 19, 2021 12:34 PM
To: Jennings, Susan <Jennings.Susan@epa.gov>; Gilbert, Jeffrey M (FDA/CVM) <Jeff.Gilbert@fda.hhs.gov>; Harbottle, Heather (FDA/CVM) <Heather.Harbottle@fda.hhs.gov>
Cc: Suarez, Stephanie <Suarez.Stephanie@epa.gov>; Sievert, Dawn M. (CDC/DDID/NCEZID/DHQP) <alz1@cdc.gov>
Subject: RE: New Chemical proposed

Susan:

Please see feedback on this below.

Thanks,
MC

Thank you for the opportunity to review. Subject matter experts from CDC's Malaria Branch and Mycotic Diseases branch reviewed this material and evaluated how a new fungicide, Ipflufenoquin, (if approved) might adversely impact resistance to anti-malarial drugs (assuming this compound has some structural relationship with anti-malarial drugs) and antifungals.

For anti-malarials: Nippon Soda Co. is proposing to use this compound for fungal control as aerial application. This type of application is unlikely to directly affect malaria parasites because quinolines kill the stage of the parasite in the human, so resistance would develop if malaria parasite infected humans are exposed to this drug and somehow facilitate parasite exposure to the drug. At least in the US, such possibilities are remote given malaria is eliminated in this country and a potential interaction with malaria parasites for this proposed compound is not likely. From the usage described, exposure might occur to avian or other non-human Plasmodium spp.

For antifungals: Since it is a new compound and a new application, there are no studies that will demonstrate resistance or a lack thereof. CDC is not currently aware of any mechanism of resistance to this drug that would promote fungal resistance. **However, we do note that it is difficult to predict the development of resistance in new compounds and therefore recommend that any consideration for approval include a strong data collection component that evaluates potential resistance development to parasitic and fungal pathogens.**

From: Jennings, Susan <Jennings.Susan@epa.gov>
Sent: Monday, August 16, 2021 8:58 AM
To: Gilbert, Jeffrey M (FDA/CVM) <Jeff.Gilbert@fda.hhs.gov>; Harbottle, Heather (FDA/CVM) <Heather.Harbottle@fda.hhs.gov>; Craig, Michael R. (CDC/DDID/NCEZID/DHQP) <bez7@cdc.gov>
Cc: Suarez, Stephanie <Suarez.Stephanie@epa.gov>
Subject: New Chemical proposed

Hi all,

Attached is a proposal to register a new fungicide, Ipflufenoquin. When this proposal went out for public comment, we received a comment that stated:

> *Synthetic quinolone antimicrobials are commonly used in clinical medicine and their common use has caused resistance to emerge in certain parasites, especially against quinoline antimalarials. Therefore, ipflufenoquin has the same potential to promote the development of resistance, particularly for use as a new class fungicide which is prone to resistance due to its mode of action. It is not acceptable to use pesticides in agriculture that may promote resistance in human pathogens.*

They cite this paper: https://www.sciencedirect.com/science/article/abs/pii/S136876460600063X?via%3Dihub

Can you tell us whether this is a concern, from a medical perspective? The cited paper was published in 2006, which is pretty old.

Please feel free to forward this if you are not the correct people to respond.

Thanks for your continued help,

Susan.

Susan Jennings
Senior Advisor for Public Health
EPA, Office of Pesticide Programs

(706) 355-8574
(703) 216-8627